UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER OF PATENTS AND TRADEMARKS
Washington, D.C. 20231
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/905,786	07/13/2001	Christian Willibald Bohm	APD1529	4008

7590 06/03/2002

Matthew E. Connors
Samuels, Gauthier & Stevens, LLP
Suite 3300
225 Franklin Street
Boston, MA 02110

EXAMINER
TRAN, TRANG U

ART UNIT	PAPER NUMBER
2614	

DATE MAILED: 06/03/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/905,786	Applicant(s) BOHM ET AL.	
	Examiner Trang U. Tran	Art Unit 2614	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *13 July 2001* .

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *17-28* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *17-28* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☒ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11)☐ The proposed drawing correction filed on _____ is: a)☐ approved b)☐ disapproved by the Examiner.

If approved, corrected drawings are required in reply to this Office action.

12)☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____ .

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

a) ☐ The translation of the foreign language provisional application has been received.

15)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) *2* .
4) ☐ Interview Summary (PTO-413) Paper No(s). _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: .

DETAILED ACTION

Specification

1. Applicant is reminded of the proper language and format for an abstract of the disclosure.

The abstract should be in narrative form and generally limited to a single paragraph on a separate sheet within the range of 50 to 150 words. It is important that the abstract not exceed 150 words in length since the space provided for the abstract on the computer tape used by the printer is limited. The form and legal phraseology often used in patent claims, such as "means" and "said," should be avoided. The abstract should describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details.

The language should be clear and concise and should not repeat information given in the title. It should avoid using phrases which can be implied, such as, "The disclosure concerns," "The disclosure defined by this invention," "The disclosure describes," etc.

2. The abstract of the disclosure is objected to because it exceeds 150 words. Correction is required. See MPEP § 608.01(b).

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 17-20, 22-25 and 27 are rejected under 35 U.S.C. 102(b) as being anticipated by Pletz-Kirsch (US. Patent No. 5,053,869).

In consider claim 17, Pletz-Kirsch discloses all claimed subject matter, note the claimed an absolute value independent shape detector for processing samples of an input signal having a synchronization pulse and a plurality of non-synchronization pluses to determine whether such samples have a predetermined sequence; said predetermined sequence being a first, absolute value independent, non-time varying portion, followed by a first, absolute value independent, time-varying portion, followed by a second, absolute value independent, non-time varying portion, followed by a second, absolute value independent, time varying portion followed by a third, absolute value independent, non-time varying portion, one of the first and second, absolute value independent, time varying portion having a positive slope and the other one of the first and second, absolute value independent, time varying portion having a negative slope is met by a level detector comprising a comparator 3, a multiplexer 4 and a register 5 (Fig. 1, col. 4, line 59 to col. 5, line 12).

In consider claim 18, the claimed wherein said absolute value independent shape detector produces a pulse when said predetermined sequence is detected is met by col. 4, lines 30-36.

In consider claim 19, Pletz-Kirsch discloses all claimed subject matter, note 1) the claimed an absolute value independent shape detector for processing samples of an input signal having a series of synchronization pulses and a plurality of non-synchronization pluses to determine whether such samples have a predetermined

sequence; said predetermined sequence being a first, absolute value independent, non-time varying portion, followed by a first, absolute value independent, time-varying portion, followed by a second, absolute value independent, non-time varying portion, followed by a second, absolute value independent, time varying portion followed by a third, absolute value independent, non-time varying portion, one of the first and second, absolute value independent, time varying portion having a positive slope and the other one of the first and second, absolute value independent, time varying portion having a negative slope, said absolute value independent shape detector producing a shape detection pulse each time said predetermined sequence is detected is met by a level detector comprising a comparator 3, a multiplexer 4 and a register 5 (Fig. 1, col. 4, line 59 to col. 5, line 12), 2) the claimed an evaluator responsive to the produced shape pulse detection pulses for determining whether such shape detection pulses are produced at a predetermined rate expected for the series of synchronization pulses is met by a comparator 27 (Fig. 1, col. 4, lines 30-36).

In consider claim 20, Pletz-Kirsch discloses all claimed subject matter , note 1) the claimed an absolute value independent shape detector for processing samples of an input signal having a series of synchronization pulses and a plurality of non-synchronization pulses, each one of said synchronization pulses preceding a segment of the input signal having non-synchronization pulses, to determined whether such samples have a predetermined; said predetermined sequence being a first, absolute value independent, non-time varying portion, followed by a first, absolute value independent, time-varying portion, followed by a second, absolute value independent, non-time varying portion, followed by a second, absolute value independent, time

varying portion followed by a third, absolute value independent, non-time varying portion, one of the first and second, absolute value independent, time varying portion having a positive slope and the other one of the first and second, absolute value independent, time varying portion having a negative slope, said absolute value independent shape detector producing a shape detection pulse and an associated value for the second, absolute value independent, non-time varying portion each time said predetermined sequence is detected is met by a level detector comprising a comparator 3, a multiplexer 4 and a register 5 (Fig. 1, col. 4, line 59 to col. 5, line 12), 2) the claimed an evaluator responsive to the produced shape detection pulses and said associated values of said second, absolute value independent, non-time varying portions for determining whether one of said associated values of said produced second, absolute value independent, non-time varying portions is substantially higher, lower, or the same as a reference value derived from a previous segment of the input signal is met by a comparator 27 (Fig. 1, col. 4, lines 30-36).

Claim 22 is rejected for the same reason as discussed in claim 19.

In consider claim 23, Pletz-Kirsch discloses all claimed subject matter, note 1) the claimed determining, absolute value independent, time varying properties of an input signal having the synchronization pulse is met by a level detector comprising a comparator 3, a multiplexer 4 and a register 5 (Fig. 1, col. 4, line 59 to col. 5, line 12), 2) the claimed comparing the determined, absolute value independent, time varying properties with absolute value independent, time varying properties expected of the synchronization pulse is met by a comparator 27 (Fig. 1, col. 4, lines 30-32), and 3) the claimed producing, based on the comparison, an output signal indicative of the detection of the synchronization pulse is met by col. 4, lines 33-36.

Claim 24 is rejected for the same reason as discussed in claim 23.

Claim 25 is rejected for the same reason as discussed in claim 23.

Claim 27 is rejected for the same reason as discussed in claim 13.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103© and potential 35 U.S.C. 102(f) or (g) prior art under 35 U.S.C. 103(a).

6. Claims 21, 26 and 28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Pletz-Kirsch (US. Patent No. 5,053,869) in view of Narusawa (US. Patent No. 4,792,852).

In consider claim 21, Pletz-Kirsch discloses all the features of the instant invention as discussed in claim 20 above except for providing the claimed wherein said evaluator includes a time window responsive to the produced shape detection pulses for determining whether said shape detection pulses are produced at a predetermined rate

expected for the series of synchronization pulses. Narusawa teaches vertical synchronizing signal detection circuit having a time window responsive to the produced pulses for determining whether such shape detection pulses are produced at a predetermined rate expected for the series of synchronization pulses (Fig. 1, a window establishing circuit 14, col. 3, lines 18-31). It would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate the 455 counter 16, the window establishing circuit 14, and a horizontal synchronizing signal compensation circuit 18 of Narusawa into Pletz-Kirsch's system in order to accuracy detecting the horizontal synchronizing signal (see col. 1, line 63 to col. 2, line 3 of Narusawa).

In consider claim 26, Pletz-Kirsch discloses all the features of the instant invention as discussed in claim 23 above except for providing the claimed comparing rate of production of the output pulses with the predetermined rate of the input signals. Narusawa teaches vertical synchronizing signal detection circuit having a 455 counter 16 , a window establishing circuit 14, and a horizontal synchronizing signal compensation circuit 18 for comparing rate of production of the output pulses with the predetermined rate of the input signals (col. 3, lines 18-36 of Narusawa). It would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate the 455 counter 16, the window establishing circuit 14, and a horizontal synchronizing signal compensation circuit 18 of Narusawa into Pletz-Kirsch's system in order to accuracy detecting the horizontal synchronizing signal (see col. 1, line 63 to col. 2, line 3 of Narusawa).

In considered claim 28, Pletz-Kirsch discloses all the features of the instant invention as discussed in claim 23 above except for providing the claimed a timer for determining time duration of one of the portions and the claimed a processor for detecting the synchronization pulse in response to the determined time duration.

Narusawa teaches vertical synchronizing signal detection circuit having the claimed a timer for determining time duration of one of the portions (see the 455 counter 16, Fig. 1, col. 3, lines 24-31) and the claimed a processor for detecting the synchronization pulse in response to the determined time duration (see a horizontal synchronizing signal detection circuit 12, Fig. 1, col. 3, lines 18-23). It would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate the horizontal synchronizing signal detection circuit associated with the 455 counter 16 as taught by Narusawa into Pletz-Kirsch's system in order to accuracy detecting the horizontal synchronizing signal (see col. 1, line 63 to col. 2, line 3 of Narusawa).

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to **Trang U. Tran** whose telephone number is **(703) 305-0090.**

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, **John W. Miller,** can be reached at **(703) 305-4795.**

Any response to this action should be mailed to:

Commissioner of Patents and Trademarks

Washington, D.C. 20231

or faxed to:

(703) 872-9314 (for Technology Center 2600 only)

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive, Arlington, VA, Sixth Floor (Receptionist).

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Technology Center 2600 Customer Service Office whose telephone number is (703) 306-0377.

TT TT
May 24, 2002

JOHN MILLER
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600